Description of Process and Summary of Cost Studies Considered in Preparing Recommended Revisions to the Uniform Per Student Funding Formula for 2007: A Report to the Mayor and the Council of the District of Columbia

October 4, 2005

A. Introduction

This report summarizes the findings of studies commissioned by the State Education Office to determine the average cost per student of providing education services in public schools in the District of Columbia. The studies are based on the assumption that the services delivered and the associated program costs will be generally equivalent to those in common practice in school districts in the Washington metropolitan region, as well as in selected school districts in other parts of the nation. The studies employ the same methodology as that used in an earlier study conducted by the State Education Office in the summer of 2001.

B. Background and Context

1. The Requirement for a funding formula

Section 2401 of the District of Columbia School Reform Act of 1995 requires that "the Mayor and the District of Columbia Council, in consultation with the Board of Education and the Superintendent, shall establish...a formula to determine the amount of—

- (A) The annual payment to the Board of Education for operating expenses of the District of Columbia Public Schools...; and
- (B) The annual payment...for the operating expenses of each public charter school."

The School Reform Act creates the authority to establish public charter schools in the District of Columbia, and to use appropriated funds for their support. The purpose of the Uniform Per Student Funding Formula is to ensure that adequate funds are available to support the annual operating costs of elementary and secondary education in the District of Columbia and to ensure that comparable funding is provided to both the District of Columbia Public Schools and public charter schools.

2. The role of the State Education Office

Public Law 13-1776, the State Education Office Establishment Act of 2000, requires the State Education Office to "make recommendations to the Mayor and the Council for periodic revisions of the Uniform Per Student Funding Formula pursuant to Section 112 of the Uniform Per Student Funding Formula Act of 2000 (as amended) and provide information and data related to such

revisions including the study of actual costs of education in the District of Columbia, consideration of performance incentives created by the formula in practice, research in education and education finance, and public comment."

3. Principles used to guide formula development

The State Education Office believes that the Uniform Per Student Funding Formula (UPSFF) should—

- a) Deliver levels of funding sufficient to provide an "adequate" education;
- b) Contain weights that accurately reflect the relative costs of critical program elements;
- c) Provide uniform treatment of DCPS and public charter schools; and
- d) Be applied in coordination with the results of audited counts of student enrollment.

4. Current formula provisions

The Uniform Per Student Funding Formula currently incorporates the following weightings for student grade level; special needs, including special education and English language literacy; residential status; and summer school participation. The foundation level and the weightings included in the formula for FY 2006 are displayed below.

Foundation Level

The foundation level or cost of providing general education services is \$7,307.47 per student for FY 2006.

Grade Level Weightings in FY 2006

Grade Levels	Weightings
Pre-School/Pre-Kindergarten	1.17
Kindergarten	1.03
Grades 1-3	1.03
Grades 4-5	1.00
Ungraded ES	1.03
Grades 6-8	1.03
Ungraded Middle School/Jr High	1.03
Grades 9-12	1.17
Ungraded Senior High School	1.17
Alternative School	1.30
Special Education School	1.17
Adult	0.75

Supplemental Weightings for Special Education, LEP/NEP, Summer School, and Residential Students for FY 2006

Level/Program	Weightings
Level 1: Special Education	.55
Level 2: Special Education	.85
Level 3: Special Education	1.50
Level 4: Special Education	2.70
LEP/NEP	0.40
Summer	0.17
Residential (Room and Board)	1.70

Residential Add-On Weightings for Special Education Students, to Support After Hours Special Education Program Needs for FY 2006

Level/Program	Weightings
Level 1: Special Education	0.374
Residential	
Level 2: Special Education	1.360
Residential	
Level 3: Special Education	2.941
Residential	
Level 4: Special Education	2.924
Residential	
Level 5: Special Education	9.400
Residential 24 Hour Services	
LEP/NEP: Residential	0.680

C. Process for Developing Funding Formula Recommendations

1. Brief Summary of the Process Used by the State Education Office to Develop Funding Formula Recommendations

The process used by the State Education Office to develop Funding Formula recommendations consists of several types of activity. These activities include:

• Continuous monitoring of the performance of the formula and the adequacy of the funding it delivers. Feedback is sought and received from a variety of sources. However, the richest source of reaction and advice comes from the Funding Formula Technical Working Group (TWG). The TWG includes representation from the organizations and agencies that regularly deal with the Formula, including those whose funding is determined by its provisions and those who must make it work. Through

the TWG's periodic meetings and its *ad hoc* committees, participants have the opportunity raise issues, identify problems, and work together in concert with the SEO to find solutions.

- Inquiry into issues or problems once they are identified. Often, TWG members provide data on an issue of concern, which may be used by SEO staff or consultants to prepare a case statement or analysis, an options paper, or a policy brief that is used to stimulate and frame the discussion at a Technical Working Group meeting. Also, practice in the District of Columbia is often benchmarked against that of other states.
- **Identification of the needs** for revision of the Uniform Per Student Funding Formula. Drawing upon knowledge gained from monitoring and inquiry activities, the SEO, in consultation with the TWG, identifies priority issues for more intensive analysis and action.
- Preparation of technical studies. After priority issues are identified and agreed upon, commissioned studies often are used to examine larger, more complex questions where expert analysis is needed. Studies and analyses also are conducted internally by SEO staff. Such technical cost and management studies are used to help determine the source of a given problem, its full scale, possible solutions, whether or not revisions to the Formula are needed, what specific changes in the Formula may alleviate the problem, and what the estimated fiscal impact of any suggested change will be.
- **Preparation and submission of recommendations** to the Mayor and the Council by the SEO. Draft recommendations are discussed and comment is received from Technical Working Group members before they are transmitted to the Mayor and the DC Council.

2. Needs for Formula Revision Identified in FY 2005

The following three issues received priority attention in FY 2005.

a) Priority Issue # 1: The need to re-examine the adequacy of the foundation level on which the Uniform Per Student Funding Formula is based. The process of re-examining the adequacy of the foundation amount also requires the re-analysis of the funding needed for each grade level.

During FY 2005, a focus was placed on examining the adequacy of the current Uniform Per Student Funding Formula foundation level.

The foundation level, which is the base against which all other Uniform Per Student Funding Formula provisions are calculated, is defined as the amount of funding per student needed to provide adequate general education services to students. General education services do not include special education, English language literacy, summer school, or other separately weighted categories that may be included in the formula. In addition, the foundation level is adjusted to provide differing levels of base funding at different grade levels.

The current foundation level of the Uniform Per Student Funding Formula, while it has annually been adjusted upward for reasons of fiscal necessity, increases in the cost of living, and pay raises exceeding the rate of inflation, has not been updated based on the results of systematic cost studies since FY 2001 (first applied to the FY 2003 budget).

b) Priority Issue # 2: The need to adjust the special education weights to a new foundation

Because of the weighting system used in calculating funding levels for special education, any increase in the foundation level results in corresponding increases in special education allocations. The foundation level increase may, in fact, cause the special education add-on weights to produce more funding than is needed to support the delivery of special education services.

It is important, then, when significant changes are made in the foundation level, that the special education add-on weights be adjusted to the new foundation. Weights should be adjusted so that the formula delivers allocations at the level needed to support high quality services that fully comply with all student IEP requirements at each special education service level (Levels 1-4).

c) Priority Issue # 3: The need to restore selected provisions lost to the Uniform Per Student Funding Formula due to the expiration of emergency or temporary amendments

The background, need, and recommendation regarding this issue are presented in a separate, accompanying report, titled *Amending the Uniform Per Student Funding Formula Legislation to close the Gaps Created by Expired Emergency and Temporary Amendments: Report to the Mayor and the Council of the District of Columbia.*

3. Summaries of Studies Commissioned by the SEO Whose Findings Form the Basis for Recommendations 1, 2, and 3 of this Submission

The following three studies were commissioned by the State Education Office to examine issues and needs related to the currency of the Uniform Per Student Funding Formula. Findings from these studies, along with

information and advice from other sources have been taken into consideration during the process of preparing recommendations for revisions to provisions of the Formula, to become effective for FY 2007 and beyond. Each study summary consists of a statement of purpose, background information, the study approach, and a list of key findings.

a) Study # 1: The Cost Per Student of a "Common Practice" Public School System FY 2005 in the District of Columbia (November 2004)

The purpose of this study was to determine the foundation level that would be needed in FY 2005 to support current costs and meet the test of funding adequacy.

Background of the FY 2005 Common Practice Study

This study is an update of a study first done in 2001 to determine the cost of providing general education services in the District of Columbia. Basing its calculations on common practices in D.C. metropolitan area schools, as well as circumstances, needs, and policies specific to public schools in the District of Columbia, the 2001 study determined the per pupil costs of the full market basket of goods and services needed at that time to provide "adequate" general education services to students without special needs.

The current study, completed in November 2004, used FY 2005 enrollment and budget data to determine a foundation level and grade level weights sufficient to provide adequate general education services during that year (FY 2005).

Approach of the FY 2005 Common Practice Study

The study first identified the educational goods and services that are needed to fill the "common practice" market basket. These components were determined by reviewing the findings of respected research on effective schools and practices, looking at practice in surrounding metropolitan area school districts, and examining current goals and plans of the District of Columbia Public Schools.

Implementation of the market basket approach required that assumptions be made about the level and costs of such things as: average class size at each grade level or span; availability of school-wide instructional and student services and the types and levels of staff needed to support them; custodial, maintenance, and utilities services for facilities; textbooks, supplies, equipment, and technology; programs for gifted and talented, vocational education, athletics, and activities; security; and central management and services.

The cost of these and other resources was then calculated on a per pupil basis. Using DCPS-wide data on number of schools and numbers of students, prototypical schools at three levels, elementary school, middle/junior high school, and high school, were created on spreadsheets that include all the market basket services and costs appropriate for each grade level or grade span used in the Uniform Per Student Funding Formula. These grade level total costs were then converted to per student costs for each level, with the lowest of these grade level costs being designated as the "foundation level."

Key Findings of the FY 2005 Common Practice Study

- The foundation amount generated by the common practice model in FY 2005 is \$7,528 per pupil. This is 16 percent more than the \$6,470 that adequate goods and services were found to cost in the 2001 study, and 9 percent more than the actual FY 2005 foundation amount of \$6,904.
- The differences reflect the effects of recent pay raises, shrinking enrollment that results in diminishing average school size, inflation, diversion of funds into state-level special education tuition and transportation, plus several new city mandates for legal and payroll costs.
- While, differences among grade level costs are roughly proportionate to those of the 2001 study, differences needing attention were found at several grade levels. Costs for kindergarten were found in the 2005 study to be significantly higher than current kindergarten weights generate. Costs for grade levels 6 8 and 9 12, as well as for alternative schools and special education schools were significantly lower than current grade level weights generate. (A significant difference was determined to be a difference of three or more percentage points higher or lower than current Formula weights.)
- b) Study # 2: The Costs of Providing Special Education Services to Students Served Within Public Schools in the District of Columbia (September 2003) This study includes an Addendum to the Report, prepared in November 2003.

The purpose of this study was to determine the adequacy of the per student amounts provided by the Uniform Per Student Funding Formula in FY 2003 for special education Levels 1 through 4. The addendum to the study examines the fiscal impact and technical considerations for implementing changes based on study findings and recommendations.

Background of the FY 2003 Special Education Services Cost Study

The current Uniform Per Student Funding Formula add-on weights for special education Levels 1, 2, 3, and 4 are based on the outcomes of a cost study completed in September 2001. The more recent study used School Year 2002-2003 data to test whether the earlier weightings were still adequate.

Approach of the FY 2003 Special Education Services Cost Study

For purposes of the Uniform Per Student Funding Formula, the extra costs of special education services are calculated based on the number of hours of specialized services specified in each student's Individual Educational Plan (IEP). The study determined the weekly hours of IEP services required for the average special education student at each of the four levels of intensity within each disability category using data from the DCPS's Special Education Tracking System (SETS) database. For each special education service level (Levels 1 - 4) the annual average per pupil cost of services required for compliance are calculated and converted to an add-on weight that becomes part of the formula.

The Addendum to the Special Education Services Cost Study 1) calculated the fiscal impact of proposed changes in the Levels 1 – 4 special education definitions (which have since been added to the Formula) both with and without consideration of the anticipated FY 2004 teacher pay raises and 2) calculated the fiscal impact of using special education add-on weights to determine per student finding levels for IEP-required special education and ESL/bilingual services provided in summer school or during an extended school year. (Note: Provisions for applying special education add-on weights to students whose IEPs require summer school or extended school year participation already have been added to the Code.)

Findings of the FY 2003 Special Education Services Cost Study

- Based on the calculations used in this study, the average per pupil costs of compliance for levels 1 and 2 may have been slightly more than the FY 2003 formula amounts (about \$200 more for level 1 and about \$150 more for level 2). The study findings also show that the per pupil costs of compliance for levels 3 and 4 may have been less than the FY 2003 formula amounts (about \$60 less for level 3 and about \$2000 less for level 4).
- Definitions of special education levels should be changed to delete references to the type of student placement and reflect only the number of hours required by student IEPs. (*Note: This has been done, and*

new definitions for Levels 1-4 are provided in the Code. The new definitions are being used by the schools in their annual student count, as well as by the State Education Office in the audit of the count.)

c) Study # 3: Special Education Funding in the Uniform Per Student Funding Formula (August 2005)

The purpose of this study was, based on the findings of the FY 2005 Common Practice Study (Study # 1 above) and the FY 2003 Special Education Services Cost Study (Study # 2 above, to perform the calculations necessary to arrive at projections of 1) an adequate foundation level for FY 2007; 2) the per-pupil special education expenditures at each of four intensity levels needed in FY 2007 to support compliance with all student IEPs; and 3) the appropriate special education add-on weights needed to generate sufficient funding to support the costs of full compliance in FY 2007.

Background of the FY 2005 Special Education Formula Funding Analysis

In order to make recommendations for revisions to the Uniform Per Student Funding Formula intended to become effective in FY 2007, it was necessary to develop a technically sound procedure for projecting the findings of studies completed in FY 2003 and FY 2005 forward to FY 2007.

Approach of the FY 2005 Special Education Formula Funding Analysis

As described above, the FY 2003 Special Education Services Cost Study (Study # 3 above) re-examined the special education Level 1 – 4 add-on weights that resulted from a special education cost analysis performed in 2001. The results of the 2003 study indicated slight under-funding at Levels 1 and 2, slight over-funding at Level 3, and significant over-funding at Level 4.

The FY 2005 Special Education Formula Funding Analysis (Study # 3 above) first converted to FY 2007 values the average per pupil costs and add-on weightings needed to provide adequate special education services at each of four intensity levels (Levels 1 – 4), as determined in the FY 2003 Cost of Special Education Services Study (Study #2 above). Then, the special education add-on weights and their associated average per pupil cost at each level were proportionally adjusted so that they could continue to provide the appropriate level of special education funding when applied to the FY 2007 foundation level proposed by the State Education Office.

Findings of the FY 2005 Special Education Formula Funding Analysis Study

This analysis determined that—

- In order to be consistent with the findings of the FY 2005 Common Practice Study, the foundation level for FY 2007 and beyond should be set at \$8002.
- Assuming a FY 2007 foundation level of \$8002, the following special education average per pupil supplemental funding levels and add-on weights will be needed to deliver services sufficient to assure full compliance with all student IEPs at intensity Levels 1 4.

Special Education	Proposed FY 2007	Resulting FY 2007
Level	Add-On Weights	Per Pupil \$ Amounts
Level 1	0.54	\$ 4,321
Level 2	0.82	6,562
Level 3	1.41	11,283
Level 4	2.21	17,684

• The District commission a study by experts in special education to examine and alternative methods of funding services for students with disabilities.

D. Other Important Issues That Have Been Identified, But Which Require Further Study

The following are some of the important issues that have been explored by the State Education Office and discussed with the Technical Working Group. Most of these issues have been referred back to the SEO for further study, pending the availability of resources.

1. Exploring the Feasibility of Alternative Ways of Funding Special Education

Background and Problem. The District of Columbia's Uniform Per Student Funding Formula (UPSFF) funds special education services at five levels of intensity, determined mainly by the average number of hours of specialized services required by the Individual Educational Plans of all students in each special education category, or level. The funding level for each category is based on the average cost of needed services. However, the range of costs for different disability categories is large. This is particularly true at Levels 4 and 5, which at the upper end includes students with serious, multiple, or even profound disabilities that require costly, high intensity services. A formula

provision based on averages cannot predict the number, distribution, or actual cost of serving students at the high cost extremes.

Needed Study and Analysis. The following activities are among those that would likely be included in the design of a proposed study for this purpose:

- Examining the practices of states and districts that seem to have found workable solutions for fairly funding services to students with low incidence, high intensity disabilities;
- Investigating the complexity, practicality, suitability, cost, and fairness of each option considered;
- Judging the fit of each of the most attractive options to public schools in the District of Columbia, including the compatibility of each with the requirements of the Uniform Per Student Funding Formula;
- Researching and overcoming any obstacles that may be faced, such as, legal or financial management questions; and
- Preparing one or more action proposals along with preliminary implementation plans.

2. Exploring Ways of Funding the Facilities Needs of Public Charter Schools in the Context of Long Range Planning.

Background and Problem. The per pupil facilities allowance for public charter schools is mandated by Congress. The facility allowance is paid to District of Columbia public charter schools on a per pupil basis for the purposes of acquiring or making improvements to facilities that will house them. Currently, the facilities allowance to charter schools is generated based on a five year rolling average cost per pupil of DCPS's capital bond financing.

On the surface, this seems to be an equitable solution. However, facilities needs differ greatly among charter schools. Some charter schools receive more facilities funding than they need and some receive less. Also, there are important differences in the limitations placed on the use of DCPS capital funds and the charter schools facilities allowance. For example, charter schools are free to use their surplus facilities allowance for non-capital purposes.

Needed Study and Analysis. A charter schools facilities study would examine the adequacy of the facilities allowance to deliver funding where it is needed and at the level needed for each charter school to have access to suitable space. Other equitable solutions will be reviewed. For example, the benefits and limitations of approaches that would fund the facilities needs of charter schools within the framework of multiyear planning will be carefully examined.

3. Determining the Cost of "Adequacy" Based on Performance Goals

Background and Problem. Strategies for funding public schools across the nation are typically not closely tied to the achievement of desired student outcomes. In fact, courts in several states have ruled that the schools in their states have not met the test of "adequacy" in the funding of their schools. These cases tend to hinge as much on the poor performance of schools as on the poor funding of schools. Such court rulings, as well as the threat of litigation, has caused a growing number of states to design and implement funding mechanisms that are more closely tied to specific expectations regarding student outcomes. This is referred to as an "adequacy" approach to school funding. The mechanism now used in the District of Columbia to determine adequate funding levels for its schools does not satisfy this newer definition of adequacy.

Needed Study and Analysis. A true adequacy study would require citywide commitment and participation. After building understanding and support, a first step in an adequacy study would be to get agreement on a citywide set of goals, standards, and expected student outcomes for all schools. A next step would be to design the instruments and procedures that would be used to measure and report student performance. Finally, it would be necessary to install a funding mechanism that matches funding levels to the achievement of performance goals. An independent commission of notables and experts would be named to guide the study and review its progress and outcomes.

4. Determining Fair Funding Procedures for Students Enrolled in STAY or Similar Programs; and

Determining Fair Funding Procedures for Students Enrolled in On-line Learning Programs

These two issues involve several similar questions and should be incorporated into a single study. For example, both require the definition of a full time equivalent student in a very flexible program where participation is difficult to audit.

Background and Problem. The STAY Program provides evening classes for students, most of whom should have, but have not yet, graduated from high school. Some of these students are also enrolled in high school courses in a day program. Participation level may vary, depending on what the program offers and the personal circumstances of the student. Should STAY students be counted based on the hours of participation, courses completed, or some other measure? Should students who participate in both day and evening classes be counted twice and the school be paid twice for some students?

Students participating in certain on-line learning programs are enrolled in a public or public charter school, but are not required to be in full attendance. While each student is engaged in a learning program delivered and facilitated through technology, learning often occurs in a place other than the school. How does the enrollment audit capture and verify these students? What obligation does the enrolling school have to keep accurate records of the time each student actually participates in the on-line learning program?

Needed Study and Analysis. These issues will require a detailed analysis of exactly how each of these programs work, including the amount of time students actually are engaged in learning. Agreements will need to be reached with the schools and with the enrollment audit contractor on how records will be kept and how the audit will be conducted. In addition, analysis will need to be done that leads to an acceptable definition of what constitutes a full time equivalent student for these and similar programs.